



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8757/2013/2
Licence Holder	Eco Resources Pty Ltd
ACN	148 991 315
File Number	DER213/001928-1
Premises	<p>Eco Resources Recycling Transfer Station</p> <p>165 Postans Road</p> <p>HOPE VALLEY WA 6165</p> <p>Legal description –</p> <p>Part of/Lot 572 and 571 on Deposited Plan 3471</p> <p>Certificate of Title Volume 2891 Folio 160 and 159</p> <p>As defined by the coordinates in Schedule 1 of the Revised Licence</p> <p>As defined by the Premises maps attached to the Revised Licence</p>
Date of Report	16 May 2022
Proposed Decision	Revised licence granted

**SENIOR MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L8757/2013/2 is held by Eco Resources Pty Ltd (the Licence Holder) for Eco Resources Recycling Transfer Station (the Premises), located at 165 Postans Road, Hope Valley, WA.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8757/2013/2 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 24 August 2021, the Licence Holder submitted an application to the department to amend Licence L8757/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Category 13:
 - Increase throughput from 52,000 to 100,000 tonnes per annual period; and
 - Increase operational hours of the crushing and screening equipment.
- Category 67A:
 - Increased throughput of from 330,000 to 500,000 tonnes per annual period;
 - Addition of the Skala Picking Station on the Licence; and
 - Addition of acceptance of residential street sweepings for storage only.
- Category 77:
 - Addition of concrete batching or cement products manufacturing to approved activities and controls on Licence; and
 - Administrative.
- Amend the designated waste acceptance areas for green waste and concrete;
- Updated site maps; and
- Update licence wording.

This amendment is limited only to changes to Category 13: Crushing of building material, 61A: Solid waste facility and the addition of Category 77: Concrete Batching or cement products manufacturing activity to the existing Licence. No changes to the aspects of the existing Licence relating to Category 57 was requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
13	52,000 tonnes per annual period	100,000 tonnes per annual period	Increased crushing and screening of building material throughput from 52,000 tonnes to 100,000 tonnes per annual period
57	200 tyres at any time	No proposed change.	No change proposed
61A	330,000 tonnes per annual period	500,000 tonnes per annual period	Increased solid waste storage and reprocessing from 330,000 tonnes to 500,000 tonnes per annual period. Addition of SKALA picking station to infrastructure table. Addition of acceptance and storage of street sweepings of 1600 tonnes per annual period.
77	N/A	100,000 tonnes per annual period	Addition of Sami Horizontal Silo (Mobile concrete manufacturing plant) and production of no more than 5000 tonnes of concrete per annual period.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in

Table 2 below.

Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Category 13 & 61A - Increased throughput and operations			
Dust	<p>Increased quantity of crushing and screening of waste material;</p> <p>Increased unloading, loading conveying and/or transportation of waste material;</p> <p>Vehicle movements on unsealed roads; and</p> <p>Lift-off from stockpiles and/or stored product, and earthworks.</p>	Air/windborne pathway	<ul style="list-style-type: none"> • The picking station, shredding, crushing and screening machines have in-built high-pressure water dust suppression systems that operate when the machine is turned on. • The mobile impact crusher and screener are operated within the western portion of the Premises, within a historical limestone quarry with walls approximately <u>15m</u> in height. • Dust suppression will be undertaken on access roads to prevent dust lift off during traffic movement by using water carts or sprinkler systems. • All working areas from which dust may be generated will be maintained in a damp condition to prevent dust lift off. • Loads and stockpiles dampened prior to unloading, loading and moving around site to ensure dust lift-off does not occur. • Entry/exit roads and stockpiles are to be kept damp (via water cart, sprinkler system and water cannon). • Crushing and screening activities to cease when weather conditions are un-suitable. • Wetting down via a watercart/hose during windy conditions will mitigate this risk. • Storage of the street sweepings will be temporary and removal will be weekly to transport to Waroona for

Emission	Sources	Potential pathways	Proposed controls
			<p>further mulching and recycling.</p> <ul style="list-style-type: none"> Access to watercart, sprinklers and hoses will enable staff to monitor and keep street sweepings from emitting any dust
Asbestos	<p>Increased quantity of acceptance, crushing and screening of waste materials;</p> <p>Acceptance of waste (namely greenwaste) directly to the greenwaste storage area;</p> <p>Acceptance of waste (namely concrete) directly to concrete stockpile;</p> <p>Increased quantity of loading, unloading, conveying and/or transportation of waste material around the Premises;</p> <p>Vehicle movements on unsealed roads; and</p> <p>Lift-off from stockpiles and/or stored product, and earthworks.</p>	Air/windborne pathway	<p><u>Green waste:</u></p> <p>Green waste loads are presorted prior to acceptance at the Premises and are tipped directly into the greenwaste stockpile area.</p> <p>Green waste found in mixed loads are sorted and separated, then the clean green waste is stored in the stockpile awaiting further processing.</p> <p><u>Concrete:</u></p> <p>No controls proposed</p>
Noise	<p>Increased operation of:</p> <ul style="list-style-type: none"> Crushers, Screeners, 	Air/windborne pathway	<p>The crushing, impacting and shredding machinery runs below 105 decibels.</p> <p>The impact crusher and screener:</p> <ul style="list-style-type: none"> will be operated on the eastern side

Emission	Sources	Potential pathways	Proposed controls
	<ul style="list-style-type: none"> Segregation of waste materials; and Transportation and vehicle movements (including reversing beepers) of materials around the Premises. 		<p>of the Premises within existing quarry walls.</p> <ul style="list-style-type: none"> Operating hours will be kept between 7am and 5pm Monday to Friday and 7am to 12pm Saturday. <p>The operations will be conducted in accordance with the <i>Environmental Protection (Noise) Regulations 1997</i>.</p>
Odour	Storage of greenwaste	Air/windborne pathway	<ul style="list-style-type: none"> Unprocessed greenwaste will be removed from the Premises within 4 weeks of being received. Mulched greenwaste will be removed from the Premises within one week of being shredded, or each Friday (whichever comes first). Stockpiles of greenwaste or mulched greenwaste must not exceed 5 meters in height.
Windblown waste	Increased unloading, loading conveying, segregation and/or transportation of waste material.	Air/windborne pathway	<ul style="list-style-type: none"> All loads must be wetted and tarped or enclosed in a bin prior to site entry or exit. Non-light fraction paper and cardboard to be baled or enclosed in a bin prior to offsite recycling or disposal.
Sediment laden stormwater	Acceptance, storage, processing and transportation of waste material at the premises.	Overland runoff, seepage to soils and groundwater	<ul style="list-style-type: none"> A truck wheel wash is located at the exit gate area to wash all exiting vehicles of excess mud and sand before leaving the Premises. No sand or dust will be allowed to build up on the entrance and exit roads. A dribble bar is also used to wash any wastewater and sand back down to the wheel wash bay for refiltering.
Leachate	Increased acceptance and storage of	Overland runoff, seepage to	<p>No street sweepings are to be tipped or deposited with any other waste types.</p> <p>Any contaminated material will be</p>

Emission	Sources	Potential pathways	Proposed controls
	greenwaste; and Acceptance and storage of residential street sweepings.	soils and groundwater	<p>directed to an appropriate landfill.</p> <p>Any runoff will be on the concrete hardstand and material will be removed weekly to ensure that water does not become stagnate.</p> <p>The material will not be doused in water and only if material is excessively dry and a windblown waste/dust risk will it be dampened.</p> <p>During winter months and in heavier rainfall periods it will be removed more regularly to be mulched with the greenwaste in Waroona.</p> <p>Inspections will be conducted in the storage bay visually for any other types of materials that can be removed and disposed of to an appropriate landfill.</p> <p>Should the entire load be contaminated it will be directed to an appropriate landfill.</p> <p>A 10m x 10m concrete hardstand with 1m high concrete blocks to 3 sides (1m high), creating a semi-enclosed bay for storage and inspection prior to removal to Waroona for recycling.</p>
Category 77 - Concrete batching			
Dust	<p>Operation of the Concrete batching plant;</p> <p>Transportation, loading and unloading of material;</p> <p>Vehicle movements on unsealed roads; and</p> <p>Dust lift off from stockpiles of aggregate, sand and cement.</p>	Air/windborne pathway	<p>Storage of cement within a cement storage silo, fitted with an air cleaning system with reusable filters, an audible level indicator and a relief valve.</p> <p>No retarders, accelerants, dyes, or additives are used in concrete / cement manufacturing.</p> <p>Prior to operation, the operator must ensure all inspection ports, hatches and all other openings are sealed to prevent dust emissions.</p> <p>If during the filling of a cement storage silo, any visible cement dust escapes from the silo the operator must ensure that no further loads of cement are unloaded into the silo until appropriate measures have been taken to prevent</p>

Emission	Sources	Potential pathways	Proposed controls
			<p>the escape of dust from the silo.</p> <p>Discharge air from the system into a weigh hopper within one metre of the ground.</p> <p>The dust collection hopper emptying maneuvers should be performed only in the presence of a filter with discharge to the ground.</p> <p>The filters are self-cleaning automatically cleaned by vibration.</p> <p>An operator must test the air cleaning system at least weekly and if it is not working efficiently must not load any cement into the silo until the system is repaired.</p> <p>No more than 5000 tonnes of concrete and cement product manufacturing per annual period.</p> <p>No more than 20 blocks of concrete and cement product manufacturing per day.</p> <p>Compliance with the <i>Environmental Protection (Concrete Batching and Cement Batching Product Manufacturing) Regulations 1998</i> (as amended).</p>
Asbestos	Concrete batching with processed waste aggregate.	Air/windborne pathway	<p>Aggregate Material is sourced from onsite recycled materials.</p> <p>All aggregate material is tested for asbestos prior to recycling.</p>
Noise	Operation of concrete batching plant.	Air/windborne pathway	Compliance with the <i>Environmental Protection (Noise) Regulations 1997</i> .
Leachate	Operation of concrete batching plant.	Overland runoff, seepage to soils and groundwater	<p>All water added to cement product manufacturing is used in the process to exact measurements. So there is no waste water during production.</p> <p>An operator must ensure trafficable areas are sealed or wetted down and are regularly swept, hosed or otherwise cleared of any loose aggregate, sand, cement, concrete or other material.</p>

Emission	Sources	Potential pathways	Proposed controls
			<p>An operator must immediately clean up any material spilt during concrete batching or cement product manufacturing.</p> <p>Rinsing and cleaning of the agitator truck after use is done in the enclosed barrel and then water is recycled as dust suppression.</p> <p>No vehicle carrying concrete, or any of the ingredients of concrete can leave the premises until it has been washed free of cement slurry and dust.</p> <p>No storage of wet cement is proposed.</p> <p>The water used to rinse the agitator truck barrel is then recycled for dust suppression onsite.</p> <p>There will be no slurry pits, silt traps or settling ponds, oil interceptors onsite.</p> <p>An operator must ensure that all waste created during concrete batching or cement product manufacturing is recycled.</p>

3.1 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Nearest residential receptors	<p>58 Sayer Road is the closest residential receptor located 755m north-north-east of premises boundary and 1089m from the activity of crushing and screening at the Premises.</p> <p>31 Postans Road is located 650m north-east from the premises boundary to the boundary of the residential receptor and 970m from the activity of</p>

	screening at the Premises.
Neighbouring industrial premises	<p>The closest infrastructure consists of Stoneridge Quarries WA – Postans Quarry (directly north and immediately adjacent of the eastern premises boundary).</p> <p>Alkina Postans Road Facility approximately 710m north of the crushing and screening activity on the Premises.</p> <p>Kwinana Alumina Refinery is located approximately 50m to the south-east from Premises boundary to Premises boundary.</p>
Environmental receptors	Distance from prescribed activity
Threatened/Priority Flora	The nearest Threatened and Priority Flora is located 15m south and 20m east of the Premises boundary (P3 – Critically endangered Tuart and Banksia Woodland).
Threatened/Priority Fauna	The nearest Threatened and Priority fauna is located approximately 850m to the west of the premises.
Carnaby Cockatoo Habitat	The nearest Carnaby Cockatoo habitat is located directly to the east and south of the premises. Exact locations are not disclosed to protect habitat.
Long Swamp conservation category wetland	935m south-west of Premises boundary
Groundwater table (non-potable purposes)	Varying from approximately 15-21m below ground level across premises.
Environmental Protection Policy Area	The Premises is located within Area C of the <i>Environmental Protection (Kwinana) (Atmospheric Wastes) Policy Area</i> .

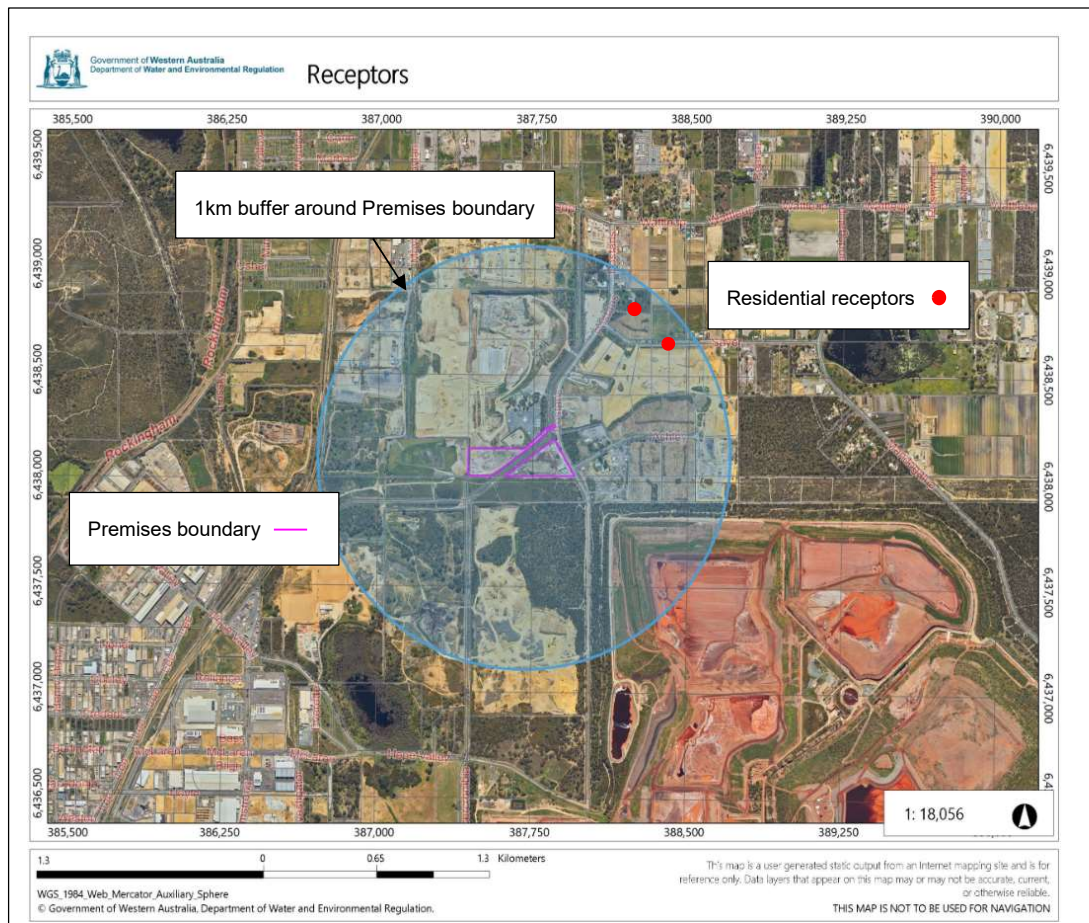


Figure 1: Distance to nearest residential receptors (Threatened/ Priority flora and fauna and Carnaby Cockatoo Habitat are not displayed on the map).

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 0. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 0), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L8757/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. unloading, loading, segregation, crushing and screening, concrete batching and acceptance and storage of street sweeping wastes.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
Category 13 & 61A	Increased quantity of crushing and screening of waste material; Increased unloading, loading conveying, segregation and/or transportation of waste material; Operation of equipment and vehicle movements on unsealed roads; and Lift-off from stockpiles and/or stored product, and earthworks	Dust	Air/windborne pathway causing impacts to health and amenity	Residential Receptors (755m north-north-east & 650m north-east); Industrial receptor surrounding Premises; and Threatened Priority flora.	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 5, 14, 16 & 17. <u>Condition's 14, 15, 18, 25 & 26</u> No complaints in relation to dust have been received by the Licence Holder or the department to date. If complaints relating to dust are received the department reserves the right to reassess the dust controls on the Licence. The Delegated Officer notes that there are multiple fugitive sources of dust in the immediately surrounding area that could contribute to cumulative impacts at receptors. The Licence Holder's proposed controls

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls			
								and existing controls on the Licence were considered adequate to manage dust. Conditions were included on the Licence to control the risk of dust emissions and/or discharges impacting receptors from the activities at the Premises.
		Noise		Residential Receptors (755m north-north-east & 650m north-east); Industrial receptor surrounding Premises; Threatened and Priority Fauna (890m east); and	The crusher and screener: <ul style="list-style-type: none"> Will be operated on the eastern side of the Premises within existing quarry walls approximately 15m in height. Operating hours will be kept between 	C = Moderate L = Possible Medium Risk	Y	Condition 15 <u>Conditions 14 & 15.</u> No complaints in relation to noise have been received by the Licence Holder or the department to date. If complaints relating to noise are received the department will reassess the noise controls on the Licence.

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors				
				Long Swamp (935m South-south-west).	<p>7am and 5pm Monday to Friday and 7am to 12pm Saturday.</p> <ul style="list-style-type: none"> No operations or activities will occur at the Premises on public holidays or Sundays. Noise from the activities at the Premises will be conducted below the assigned noise levels specified in the <i>Environmental Protection (Noise) Regulations 1997</i>. 			<p>The Acoustic Assessment submitted with the application confirmed noise emissions from the equipment and vehicles operating at the Premises comply with the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 1997 (WA)</i>.</p> <p>Condition 15 (Table 4, Row 1) was included to ensure the crushers and screener are operated at the location proposed.</p> <p>Condition 15 (Table 4, Rows 1, 2, 3, 4 & 5) were amended to the proposed operational hours and to control noise emissions.</p>

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Acceptance of green waste directly to greenwaste storage area; and Acceptance of residential street sweeping waste at the Premises.	Asbestos	Acceptance, handling, loading, unloading and transportation of products Air/windborne pathway causing impacts to health and amenity.	Residential Receptors (755m north-north-east & 650m north-east); Industrial receptors surrounding Premises; Threatened and Priority Fauna (890m east); Threatened and Priority Flora; and	Green waste loads are presorted prior to acceptance at the Premises and are tipped directly into the greenwaste stockpile area. Green waste found in mixed loads are sorted and separated, then the clean green waste is stored in the stockpile awaiting further processing.	C = Severe L = Possible Extreme Risk	N	Conditions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 15. <u>Conditions 14 & 15.</u>	The department considered pre-sorted loads of green waste tipped directed to the green waste hard stand to be acceptable. However, additional conditions were included on the Licence to control potential asbestos emissions and/or discharges during unloading of residential street sweepings and greenwaste directly to dedicated hardstand areas.
Acceptance of concrete directly to concrete stockpile.			Long Swamp (935m South-south-west).	No controls proposed.			Conditions 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 27, 28, 29.	The department notes concrete waste is considered a type of C&D waste by the DWER Asbestos Guidelines. The department

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Risk Event						Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
								30 & 31.	requires C&D waste to be managed in accordance with the DWER Asbestos Guidelines. The Delegated Officer does not consider the Licence Holder's proposal to accept concrete waste directly to a concrete stockpile with, no additional proposed controls, to be sufficient to control potential asbestos emissions or discharges. Concrete waste must be accepted, inspected and unloaded at the Premises in accordance with the existing conditions on the Licence.

Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls			
	Increased loading, unloading, storage and processing of greenwaste	Odour	Air/windborne pathway	Residential Receptors (755m north-north-east & 650m north-east); and Industrial receptors surrounding Premises.	<p>Unprocessed greenwaste will be removed from the Premises within 4 weeks of being received.</p> <p>Mulched greenwaste will be removed from the Premises within one week of being shredded, or each Friday (whichever comes first).</p> <p>Stockpiles of greenwaste or mulched greenwaste must not exceed 5 meters in height.</p>	<p>C = Moderate</p> <p>L = Possible</p> <p>Medium Risk</p>	Y	<p>No complaints in relation to odour have been received by the Licence Holder or the department to date.</p> <p>If complaints relating to odour are received the department will reassess the noise controls on the Licence.</p> <p>The Licence Holder's proposed controls were considered sufficient to control odour emissions from the storage of green waste at the Premises.</p> <p>Conditions were included on the Licence to control potential odour emissions relating to storage of green waste and/or mulch</p>

Risk Event						Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
									material.
	Increased unloading, loading conveying, segregation and/or transportation of solid waste material.	Windblown waste	Air/windborne pathway	Residential Receptors (755m north-north-east & 650m north-east); and Industrial receptors surrounding Premises; Threatened and Priority Fauna (890m east); Threatened and Priority Flora; Long Swamp (935m South-south-west) Groundwater (15 mbgl).	Refer to Section 3.1	C = Major L = Possible High Risk	Y	Condition 21 <u>Conditions 14 & 20.</u>	Existing controls on the Licence were considered sufficient to control windblown waste material from being emitted or discharged from the premises. These controls are considered necessary to limit windblown waste impacts to threatened and priority flora and fauna and Long Swamp. Existing controls were updated to the departments current format.
	Increased	Contaminated	Overland	Threatened	A truck wheel	C =	N	<u>Conditions</u>	Contaminants

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Risk Event						Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
	acceptance, storage, processing and transportation of waste material at the premises.	stormwater	runoff and infiltration causing soil, surface water and groundwater contamination	and Priority Fauna (890m east); Threatened and Priority Flora; Long Swamp (935m South-south-west); and Groundwater (15 mbgl).	wash is located at the exit gate area to wash all exiting vehicles of excess mud and sand before leaving the Premises. No sand or dust will be allowed to build up on the entrance and exit roads. A dribble bar is also used to wash any wastewater and sand back down to the wheel wash bay for refiltering. The Licence Holder must direct shredded waste non-recyclable waste to a licensed disposal facility at least once in each 7 day period.	Moderate L = Possible Medium Risk		15 & 23.	typically associated with Inert Waste Type 1 are unlikely to present a significant risk to surface and / or groundwater and the substantial depth to groundwater also reduces the risk of potential contaminants migrating to and being transported to groundwater. Conditions were included on the Licence to control contaminated stormwater from being emitted or discharged from the Premises.

Risk Event						Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Category 77	Acceptance, storage and processing of waste (waste types) for the reconstitution of processed waste materials into concrete blocks; Vibration system to facilitate the descent of material; and Automatic washing of the piping and percolation of that water through waste material and leaching out some of the contaminants; and Spills and/or malfunctions.	Noise	Air/windborne pathway causing impacts to health and amenity	Residential Receptors (755m north-north-east & 650m north-east); Industrial receptor surrounding Premises; Threatened and Priority Fauna (890m east); Threatened and Priority Flora; and Long Swamp (935m South-south-west).	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<u>Condition 15 (Table 4, Row 6 (a) & (b)).</u>	A noise assessment submitted with the application confirmed noise emissions emitted from the Premises were below the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 2007 (WA)</i> . Controls pertaining to operational hours were included on the Licence to limit noise emissions from the Premises during hours where people are more likely to be at home.
		Dust	Air/windborne pathway causing impacts to	Residential Receptors (755m north-north-east & 650m north-	Refer to Section 3.1	C = Moderate L = Unlikely		<u>Condition 15 (Table 4, Row 6 (c)).</u>	The Licence Holder's proposed controls were consistent with the <i>Environmental Protection (Concrete</i>

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Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls			
			health and amenity	east); and Industrial receptor surrounding Premises. Threatened and Priority Fauna (890m east); Threatened and Priority Flora; and Long Swamp (935m South-south-west).		Medium Risk		<i>Batching and Cement Batching Product Manufacturing) Regulations 1998 (WA).</i> Additional controls were included on the Licence to control dust from the activity of concrete manufacturing.
		Asbestos	Air/windborne pathway causing impacts to health and amenity	Residential Receptors (755m north-north-east & 650m north-east); Industrial receptor surrounding Premises. Threatened and Priority Fauna (890m east);	Refer to Section 3.1	C = Severe L = Possible Extreme Risk	N	<u>Condition 14, Table 2, Row 10).</u> Regulatory controls in the existing Licence are considered sufficient, however an additional control requiring aggregate and sand to meet the departments Asbestos Guidelines limit of 0.001% w/w prior to processing will be included to control the risk of

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors				
				Threatened and Priority Flora; and Long Swamp (935m South-south-west).				asbestos emissions in the use of recycled products in cement block manufacturing.
		Contaminated stormwater	Overland runoff and infiltration causing soil, surface water and groundwater contamination	Threatened and Priority Fauna (890m east); Threatened and Priority Flora; Long Swamp (935m South-south-west); and Groundwater (15 mbgl).	Refer to Section 3.1	C = Minor L = Possible Medium Risk	N	<p><u>Condition 14, Table 2, Row 10, (d), (f), (h).</u></p> <p>Only concrete blocks are proposed to be produced on the Premises, where exact quantities are utilised in the process. No residual concrete slurry will be produced as part of the block manufacturing process. No concrete slurry pond is required.</p> <p>The Licence Holder's proposal to clean the agitator and reuse the wastewater as dust suppression on the Premises would require a settling</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls			
								<p>pond or sediment removal system in accordance with the <i>Environmental Protection (Concrete Batching and Cement Batching Product Manufacturing) Regulations 1998 (WA)</i>.</p> <p>The Delegated Officer considers the proposal to clean the agitator and reuse the wastewater reasonable with additional controls in place to control contaminated stormwater emissions.</p> <p>Conditions were included on the Licence to prevent wastewater containing sediment being emitted or</p>

Risk Event						Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities		Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
									discharged on or off the Premises.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal 10/11/2021.	On 24/11/2021, the City of Kwinana replied advising the Development Application (DA) was under assessment. On 31/01/2022 the City of Kwinana advised the DA had been withdrawn due to further information required. On 27/04/2022, the City of Kwinana requested Land Use Planning Advice from the department.	LUPA advice to be provided by 27 May 2022.
Development WA advised of application on 10/02/2022.	Refer to Appendix 1.	Refer to Appendix 1.
The Licence Holder was provided with draft amendment on 12/05/2022.	N/A	N/A

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
N/A	Page 1 – Expiry date updated from 11/04/2022 to 11/04/2024.
Definitions	Definitions Table updated to department's current format.
Interpretation	Updated condition to department's current format.
1 (Table 1)	<ul style="list-style-type: none">Condition updated to department's current format. Inclusion of authorisation to accept residential street sweepings, increase the combined total of waste per annual period, inclusion of Category;Inert Waste Type 1 was further defined under 'Acceptance and Specification¹' to specify construction and demolition waste and scrap

	<p>metal. Reference to Special Waste Type 1 was moved to 'Acceptance and Specification';</p> <ul style="list-style-type: none"> • Inert Waste Type 2 specifications were moved from under Waste Type to 'Acceptance and Specification'; • Table updated to include Clean Fill; • Greenwaste, cardboard and paper were renamed to Putrescible waste under 'Waste Type' and each item specified under 'Acceptance and Specification'; and • Note 1: Reference to additional legislative requirements was included under Table 1 for Controlled Waste(s).
2.	Timeframe included on condition for enforceability.
3.	<ul style="list-style-type: none"> • Condition removed - waste unloading areas now specified in Waste Processing and operations section. • Previous Condition 4 now replaces Condition 3. Condition updated to include reference to construction and demolition material consistent with the department's Asbestos Guidelines.
4.	Clerical error rectified - Condition separated to stand alone condition.
5, 6, 8, 10, 11, 12 & 13.	Conditions included and/or updated to department's current standard condition, format and/or wording.
9	Condition 9 removed as dust/asbestos emissions are adequately controlled by other conditions on the Licence.
14	<p>Condition 14 (Table 2) was updated to:</p> <ul style="list-style-type: none"> • department's current standard condition, format and/or wording and specify waste unloading locations; • Include all category activities, process limits and/or specifications; and • Include controls pertaining to greenwaste acceptance, storage and processing.
19 & 20	Conditions moved to Condition 14 (Table 2, Rows 3 & 4) and reference to bailing removed as Licence Holder advised the activity of bailing no longer occurs at the premises.
20	Updated to department's current standard condition, format and/or wording.
23	Condition updated to Licence Holders proposed wording and timeframe included on condition for enforceability.
25 & 26	Conditions included to control dust/asbestos emissions.
30	Updated to department's current standard condition, format and/or wording.
32	Updated to department's current standard condition, format and/or wording.
35	AACR reporting period updated from 60 days to 90 days.
36	Environmental Reporting period updated from annually to biannually.

Schedule 1	Premises maps updated with recent aerial imagery and waste unloading areas defined.
Schedule 3, 4, 5 & 6	Revised to current licensing format and the updated format of the DWER Asbestos Guideline.
Schedule 6	Revised to current licensing format.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. DWER 2021, *Guideline: Managing Asbestos at Construction and Demolition Waste Recycling Facilities*, Perth, Western Australia.
6. Department of Water and Environmental Regulation (DWER) 2019, *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)*, Perth, Western Australia.

Appendix 1: Summary of DevelopmentWA comments on application.

Consultation method	Comments received	Department response
DevelopmentWA was advised of proposal on 21/02/2022.	<p>On 24/11/2021, DevelopmentWA replied advising DevelopmentWA notes the following:</p> <ul style="list-style-type: none"> - There are current approvals for “Open Air Storage”, “Crushing of Concrete”, “Open air storage of green waste / mulched waste and sand” and “Recycling Centre”. There does not appear to be any approval for “Concrete Batching”. - Current approvals over Lots 571 and 572 are; <ol style="list-style-type: none"> 1. Current valid approvals DA7628 (Open Air Storage), 8365 (Crushing of Concrete, Open air storage of green waste / mulched waste and sand) and 9835 (Recycling Centre) expire on 11 April 2022. 2. DA 7628 and 8365 are on Lot 572 and DA9835 is on Lot 571. 3. DevelopmentWA understands an application to renew the existing approvals including a “Concrete Batching Plant” was submitted to the City of Kwinana in mid 2021, however DevelopmentWA has no record on the status of the application. 4. The existing development on site does not align with the previously approved Development Approvals and is considered unauthorised development. 	<p>The department notes DevelopmentWA’s comments in relation to planning approval and development approval recommended to be considered by the City of Kwinana.</p> <p><u>Land Use Planning:</u></p> <p>A decision under Part V of the EP Act on an assessment of an application may be made prior to the final determination of a planning application. However, the department recognises the importance of land use planning in the context of the delivery of appropriate public health and environmental outcomes and will have regard to the processes and views of other authorities in its decision making process.</p> <p>An instrument granted by the department only provides a defence for the occupier for offences under Part V, Division 3 of the EP Act, provided the conditions contained within the licence have been complied with and not for any offences under planning legislation. An occupier who begins works on or operates a prescribed premises without the necessary approvals from planning authorities does so at its own risk.</p> <p><u>Separation Distances:</u></p> <p>The department uses a risk-based framework when undertaking assessments of works approval and licence applications made under Part V Division 3 of the Environmental Protection Act 1986 (EP Act). Risk-based regulation ensures that the department will regulate so that there is not an unacceptable risk of harm to public health or the environment, and so that licensing and approval decisions, including any conditions imposed on</p>

	<p>5. There have been no previous approvals for any development over the Western Portion of the site, however it would appear that works have been undertaken over this area of land. In addition, the western portion of Lot 572 appears to have been filled without any approvals.</p> <p>6. Setback to sensitive receptor. There appears to be existing Dwelling non-conforming uses within the vicinity of the site. The applicant should demonstrate to the satisfaction of the City that the proposal complies with EPA Guidance Statement 3 or provides an adequate buffer/ setback to the sensitive receptor</p> <p>A valid Development Approval is required to operate the proposed activities “Crushing of building material, “Solid waste facility” and “Concrete batching”. It is noted that some of these activities have been approved to operate over the site until 11 April 2022, however the existing development differs from the current on site operations. It is worthwhile noting that a sensitive receptor is within proximity of the site.</p>	<p>any approval, will be proportionate to the level of risk that the activity poses to public health and environment.</p> <p>In line with the risk-based assessment framework, the department takes separation distances into consideration on a case-by-case basis. While consideration may be given to EPA’s guidance on separation distances, it is not a limiting factor in the department’s decision-making process.</p>
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Appendix 3: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	<input type="checkbox"/>				
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>
		Has the works approval been complied with?			Yes <input type="checkbox"/> No <input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?			Yes <input type="checkbox"/> No <input type="checkbox"/>
		Date Report received:			
Renewal	<input type="checkbox"/>	Current licence number:			
Amendment to works approval	<input type="checkbox"/>	Current works approval number:			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8757/2013/1		
		Relevant works approval number:		N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>
Date application received		24/08/2021			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Eco Resources Pty Ltd			
Premises name		Eco Resources Recycling Transfer Station			
Premises location		165 Postans Road, Hope Valley WA 6165 Being Lot 572 and part of Lot 571 on Plan 3475. Certificate of Title Volume 2891 Folio 160 and 159			
Local Government Authority		City of Kwinana			
Application documents					
HPCM file reference number:		2013/001928-1			
Key application documents (additional to application form):		<ul style="list-style-type: none"> • Additional Information • Updated site map • Environmental Management Plan • Dust Management Plan 			

	<ul style="list-style-type: none">• Noise management Plan• Acoustic assessment• Asbestos Management Plan• Odour Management Plan• Prohibited Products Management Plan	
Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	<p><u>Licence amendment</u></p> <ul style="list-style-type: none">• Licence Amendment – Category 13:<ul style="list-style-type: none">○ Increase throughput from 52,000 to 100,000 tonnes per annual period; and○ Increase operational hours of the crushing and screening equipment.• Category 67A:<ul style="list-style-type: none">○ Increased throughput of from 330,000 to 500,000 tonnes per annual period;○ Addition of the Skala Picking Station on the Licence;○ Addition of acceptance of residential street sweepings for acceptance and storage; and○ Waste and product storage locations defined.• Category 77:<ul style="list-style-type: none">○ Addition of concrete batching or cement products manufacturing to approved activities and controls on Licence;• Amend the designated waste acceptance areas for green waste and concrete.• Updated site maps; and• Update licence wording.	
Category number/s (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	Production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 61A: Solid waste facility	Assessed – 330,000 tonnes per annual period	Proposed change to: 500,000 tpa
Category 13: Crushing of building material	Assessed – 52,000 tonnes per annual period	Proposed change to: 100,000 tpa
Category 77: Concrete batching or cement products manufacturing	N/A	Proposed – 100,000 tpa

Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Certificate of title <input checked="" type="checkbox"/> (On file, own Lot 572) General lease <input checked="" type="checkbox"/> (Portion of Lot 571) Expiry: 30/06/2022 Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input checked="" type="checkbox"/> Expiry: <ul style="list-style-type: none"> • Certificate of Title issued to Waroona Resources Pty Ltd. • ASIC Extract confirmed Waroona Resources Pty Ltd has the same directors as Eco Resources Pty Ltd. • Access to Premises via leased portion of Lot 571. • Premises boundary crosses neighboring premises.
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Approval: DA7628 & DA836 Expiry date: 11 April 2022 If N/A explain why: Planning Approval expired. Concurrent application with City of Rockingham & Development WA.
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.

Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: RF10392 Licence/permit No: 176089 Existing licence: GWL176089(1) Expiry: 14/01/2023
Does the <i>proposal</i> involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>The Environmental Protection (Unauthorised Discharges) Regulations 2004;</i> <i>The Environmental Protection (Controlled Waste) Regulations 2004;</i> <i>The Environmental Protection (Concrete Batching and Cement Batching Product Manufacturing) Regulations 1998 (as amended);</i> <i>The Environmental Protection (Noise) Regulations 2007; and</i> <i>The Environmental Protection (Kwinana) (Atmospheric Wastes) Policy Area.</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy Area.

Is the Premises subject to any EPP requirements?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Regulation of particulates may be relevant to potential dust impacts.
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Classification: N/A Date of classification: N/A